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**Smith et al.**

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(54) **AUTOMATIC DIRECTIONAL CONTROL SYSTEM FOR VEHICLE HEADLIGHTS**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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**Related U.S. Application Data**

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(51) **Int. Cl.**  
**B60Q 1/00** (2006.01)  
**B60R 22/00** (2006.01)

(52) **U.S. Cl.** ..... **362/465; 701/49**

(58) **Field of Classification Search** ..... 362/37,  
362/465–466; 315/82; 701/49

See application file for complete search history.

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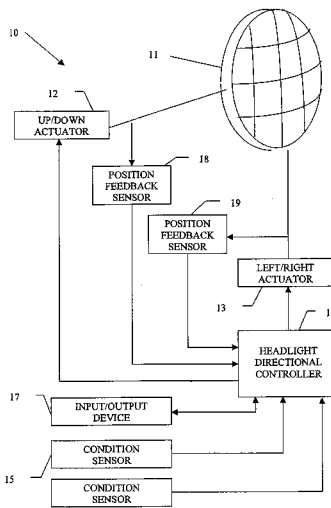
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(57) **ABSTRACT**

A structure and method for operating a directional control system for vehicle headlights that is capable of altering the directional aiming angles of the headlights to account for changes in the operating conditions of the vehicle. One or more operating condition sensors may be provided that generate signals that are representative of a condition of the vehicle, such as road speed, steering angle, pitch, suspension height, rate of change of road speed, rate of change of steering angle, rate of change of pitch, and rate of change of suspension height of the vehicle. A controller is responsive to the sensor signal for generating an output signal. An actuator is adapted to be connected to the headlight to effect movement thereof in accordance with the output signal. The controller can include a table that relates values of sensed operating condition to values of the output signal. The controller is responsive to the sensor signal for looking up the output signal in the table.

**5 Claims, 7 Drawing Sheets**



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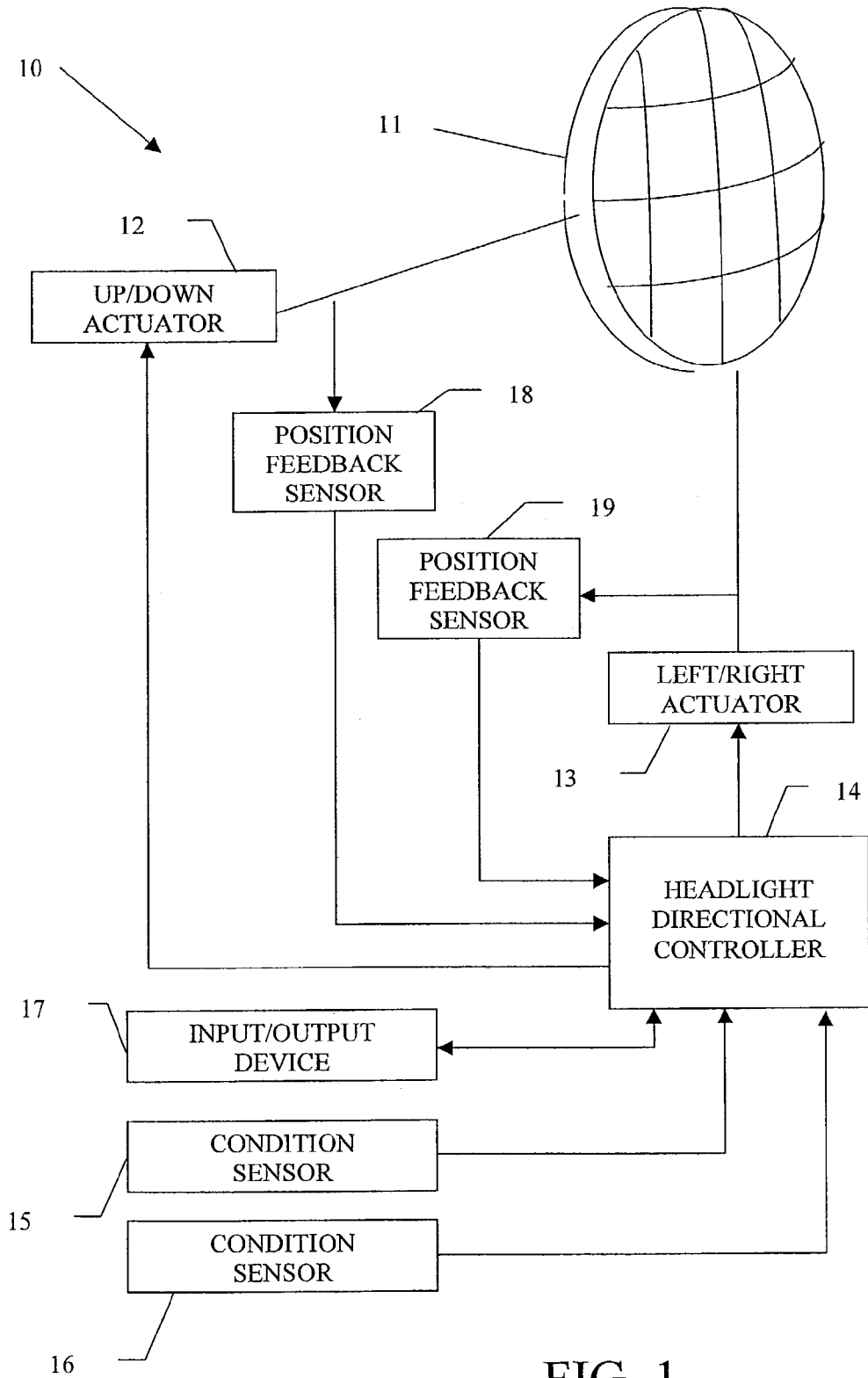


FIG. 1

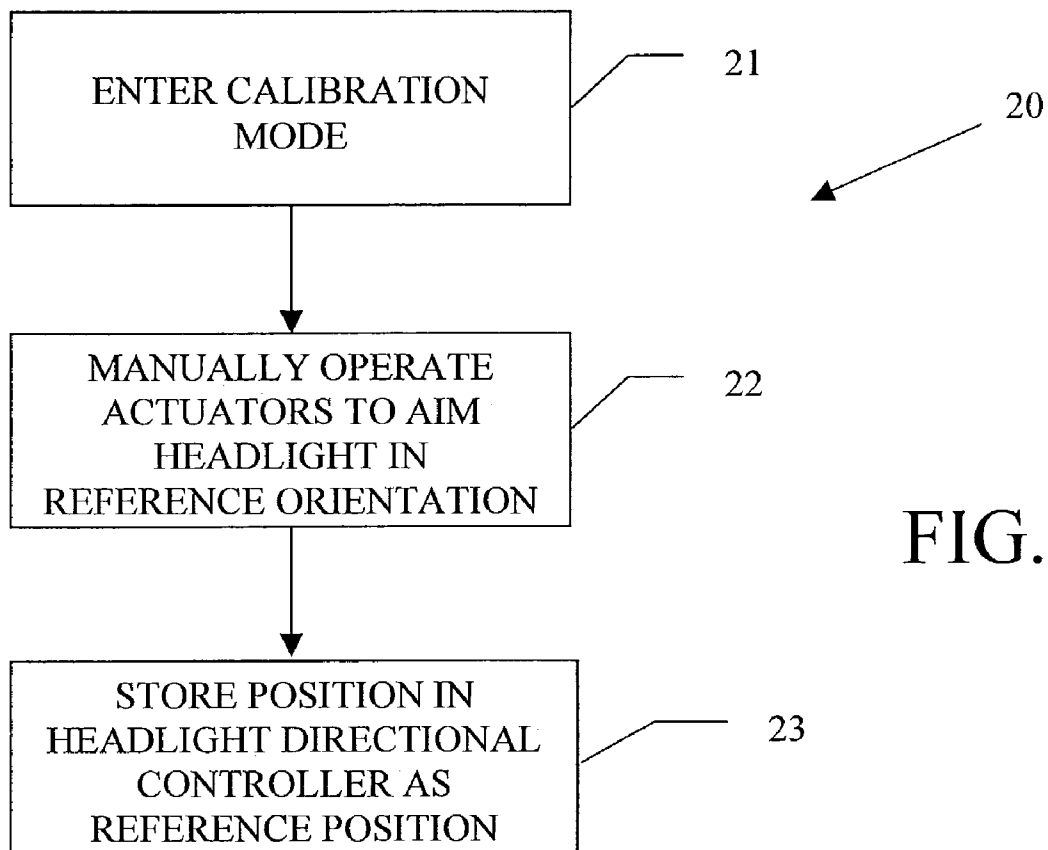


FIG. 2

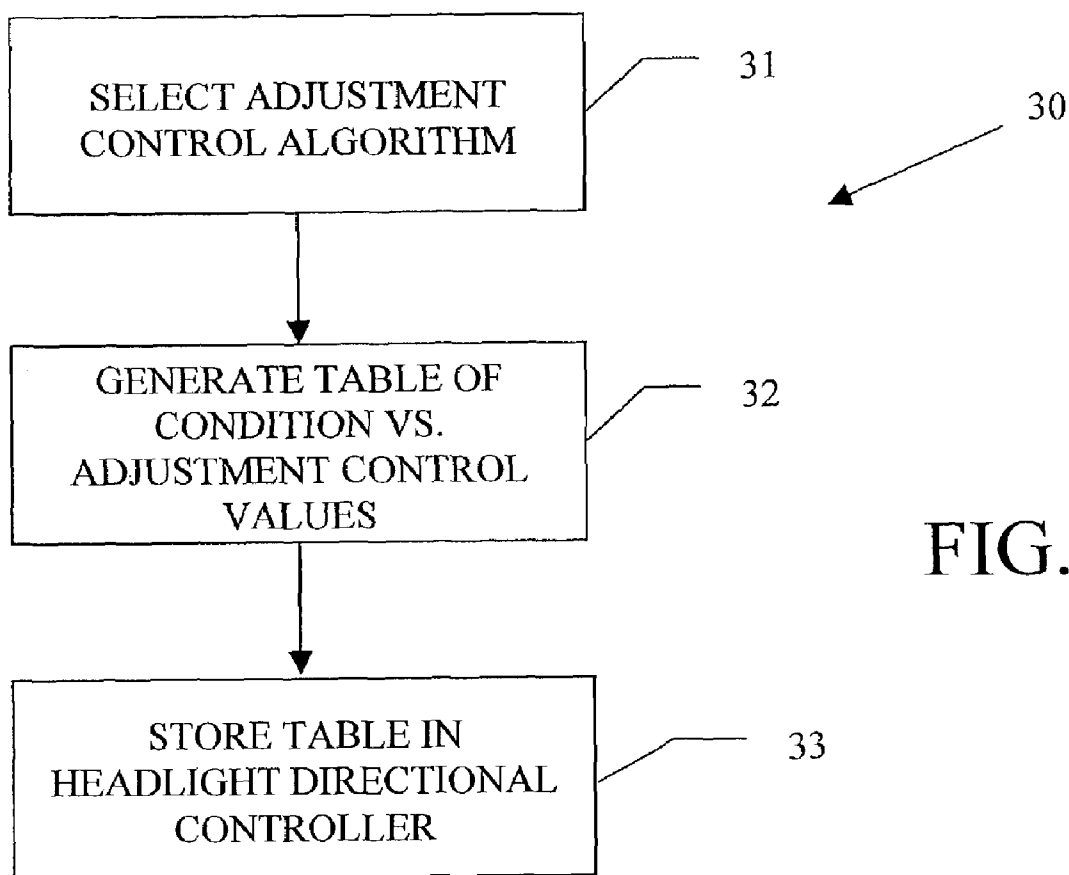


FIG. 3

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